

Working Worms

Your guide to having thousands of pets

Materials

Try to get everything for free. Be creative in your reuse.

Two nesting, opaque plastic bins

One lid or cardboard cover

Shredded paper

Vegetable food scraps

Composting worms, aka redworms, *Eisenia fetida*



To do and notice

1. Drill some drainage holes in the bottom of one bin and aeration holes near the top of the same bin.
2. Find something free to serve as spacers between the two bins (PVC scrap, aluminum foil, etc.) Use it to prop the bin with holes 1-2" inside the intact bin.
3. Fill the upper bin with dampened shredded paper and some food scraps. Ideally, this can sit for up to two weeks before adding your worms.
4. Add your worms.
5. Monitor for too much moisture. Mix from time to time. Add food scraps and paper as needed. Watch your trash turn into garden treasure.



What's going on?

Composting worms eat the bacteria that feed on rotting food. They also process some of the food and surrounding material to create a nutrient rich byproduct, called worm castings or vermicompost. By feeding worms your unwanted plant waste, you can generate quality humus for your garden with very little effort.

Resources

There are numerous books and web resources about worm composting. The classic introductory book is *Worms Eat My Garbage* by Mary Appelhof. Here are some websites that have been very useful to me in learning how to vermicompost.

<http://forums.gardenweb.com/forums/verm/>

<http://vermicomposters.ning.com/>

<http://www.redwormcomposting.com/>

Quick Tips

Feeding your worms

- The primary cause of worm bin death is overfeeding. Take it easy on the food, especially when your worms are first acclimating to their new bin. Think about the total volume that your worms take up. Start by adding half of that amount of food.
- Anything you can eat, they can eat. Having said that, the more quickly something rots, the more easily your worms will process the food. Cutting vegetables into small pieces or freeze/thawing will help hasten decomposition.
- Especially when your bin and population are small, you may want to avoid foods that are high in fat (like cheese), citrus, and meat.
- Always balance the food you add with some shredded paper. Quality compost needs an optimal ratio of carbon to nitrogen, and your food scraps are high in nitrogen. Add in whatever carbonaceous waste you generate, like soiled paper towels, cardboard tubes, newspaper, etc. If you are going away for a while, just feed your worms wet, shredded paper. They can exist on this for a long time.

Maintaining your horde

- With a small bin, moisture control is your biggest concern. You want the environment close to what a damp sponge feels like. Worms take in oxygen through their skin, so the bin should not be overly wet, or it will become anaerobic.
- With a good feeding schedule, your worms will populate your bin at a density that makes them happy. If you want to keep expanding your horde, you can stack an additional bin above your current one or make a completely new bin. If you have as many worms as you want, they make great gifts.
- At some point, there will be more compost than shredded paper. There are many different strategies that you can find online for how to separate your worms from your compost. Picking them out is the simplest, but most labor-intensive method.

Troubleshooting

- If you smell, something is wrong. The conditions in your worm bin have turned hospitable for anaerobic bacteria. If too wet, add some dry paper. If too much food, remove some. If too compacted, mix everything around to introduce some oxygen.
- If your worms are wandering, they must not like their home. Is it too wet or dry? If you are just starting your bin, shine a light on the outside. The worms will prefer the dark bin you have set up for them.
- You may find over time that your bin has unwanted guests, like mites, potworms, or millipedes. For the most part, these are harmless and just aiding in decomposition. If they really bother you, keep your bin on the drier side.

The vermicompost your worms make is some of the best organic fertilizer available. Sprinkle anywhere in your garden for happy plants or give it to your favorite gardener for a happy friend.